

# Maryland Energy Sector Partnership: Smart, Green, and Growing

**October 20, 2009**



## **In Response to:**

**SGA/DFA PY-08-20**

American Recovery and Reinvestment Act of 2009 –  
State Energy Sector Partnership (SESP) and Training Grants

## **Submitted by:**

Governor's Workforce Investment Board  
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Submitted to:  
U.S. Department of Labor  
Employment and Training Administration

SGA/DFA PY-08-20  
200 Constitution Avenue NW, Room N4716  
Washington, D.C. 20210





**STATE OF MARYLAND**

OFFICE OF THE GOVERNOR



**MARTIN O'MALLEY**  
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TTY USERS CALL VIA MD RELAY

October 9, 2009

The Honorable Hilda L. Solis  
United States Department of Labor  
Francis Perkins Building  
200 Constitution Avenue, NW  
Washington, DC 20210

RE: State Energy Sector Partnership (SESP) and Training Grants: SGA/ DFA PY-08-20.

Dear Secretary Solis,

Please accept the enclosed grant application from the Governor's Workforce Investment Board of Maryland (GWIB) for the State Energy Sector Partnership and Training Grant: SGA/DFA PY-08-20. My Administration stands ready to support the GWIB, the proposed Maryland Energy Sector Partnership (MSEP), and the regional project teams composed of local workforce investment boards, community colleges, employers, and others, to train and place Marylanders in new and emerging jobs in the green economy. Our state workforce agencies including the Maryland Department of Labor, Licensing and Regulation, the Maryland Energy Administration, the Maryland Department of Business and Economic Development, and the Maryland Department of Housing and Community Development will be active and collaborative partners in this important green jobs training and job placement strategy.

We spent much of the first two years of my Administration advancing a forward looking vision on energy and climate issues. Maryland now has a comprehensive energy policy supported by implementation strategies, regulations, and incentives that are designed to stimulate economic development in energy efficiency, the development of new sources of renewable energy, and the reduction in greenhouse gas emissions.

Investments in these initiatives already have begun to stimulate job growth in a wide range of industry sectors of Maryland's green economy. To sustain our efforts, we need to do much more to prepare a skilled workforce for green jobs and create a pipeline of services with the capacity to educate, train, and certify workers to meet industry needs and standards. Creation of the MESP is critical to achieving these goals.



One of my foremost priorities is to strengthen and grow the ranks of an upwardly mobile middle class. While the main purpose of the grant we are seeking is to train and put Marylanders to work, it also is about embracing the strengths of Maryland's innovation economy and connecting Marylanders who have had limited opportunity in the past with access to jobs in a future-oriented, growth industry. Specifically, this grant funding will enable our State workforce investment board and the regional project teams to deliver job training to the unemployed, low wage workers, untapped populations, veterans, and incumbent workers needing to update their skills for the new jobs in the emerging green economy.

The application was developed by an interdisciplinary group of senior members of my Administration, along with partners in organized labor, and in the private, academic, and non-profit sectors. Promoting workforce training in the green energy sector is of strategic importance to all of us in Maryland both because we believe it is critical to the future success of Maryland workers, particularly those who have had limited opportunities in the past, and also because it is a key foundation of our knowledge-based, innovation economy. I hope that you will join us in promoting Maryland's green economy and green workforce training by supporting our proposal for the *State Energy Sector Partnership* funding.

Sincerely,

A handwritten signature in black ink, appearing to read "Martin O'Malley", with a stylized, cursive script.

Martin O'Malley  
Governor

c: Eric M. Seleznow, director, Governor's Workforce Investment Board

## **1.0 STATEMENT OF NEED**

### **1.1 Maryland's Existing Energy Policy**

Reliable, affordable, and, for many, domestic sources of energy are essential for economic and workforce development. Concerns about Maryland's demand and supply imbalances, volatile energy costs, constraints and potential disruption of energy supplies, and the sustainability of our way of life are changing public attitudes and habits. Maryland is undergoing a shift in the way it produces, distributes, uses, and conserves energy – a shift toward an emerging green economy.

Under the leadership of Governor Martin O'Malley, the State's energy policy, designed to help “consumers keep their bills down, their lights on,” and to achieve the State's climate and environmental goals, consists of four strategies: (1) increase electricity supplies through new sources of energy; (2) promote sustainability in an effort to prevent, reduce, or remove environmental pollution and restore damaged natural resources; (3) conserve and use energy more efficiently; and (4) create a Strategic Energy Investment Fund to finance energy efficiency, promote renewable energy and stimulate Maryland's emerging clean energy industry.

Maryland has put substantial thought and effort behind its comprehensive energy policy. Recent efforts include Governor O'Malley's 2008 Maryland Strategic Electricity Plan; the establishment of the Maryland Commission of Climate Change, as well as legislation like the EmPOWER Maryland Energy Efficiency Act, which commits the State to a 15% reduction in per capita electricity consumption by the end of 2015. Additionally, the Governor has appointed industry and state leaders, including the Maryland Energy Administration (MEA) director, to the Maryland Clean Energy Center (MCEC) Board, whose purpose is to promote clean energy technology, economic development and jobs within Maryland.

The O'Malley-Brown Administration supports the Maryland Commission on Climate Change (established in 2007) recommendation to reduce greenhouse gas emissions to 1990 levels by the year 2020. To achieve this goal, Maryland is one of few states to establish a Renewable energy Portfolio Standard (RPS) requiring a portion of all retail electricity sales in the State to come from renewable sources.

The Governor is engaging citizens, non-profits, community groups, and the business community, including builders/developers, as working partners in creating a greener more prosperous Maryland. The *Smart, Green and Growing* outreach and education campaign, hosted on the State website, connects traditional green initiatives (land preservation, Bay restoration, etc.) with Smart Growth initiatives (Transit, and Transit Oriented Development, community re-development, Smart Sites, economic and workforce development.). Nearly all state agencies have programs that tie into this effort, including MEA (energy); Department of Business and Economic Development (DBED) (businesses), and Department of Labor, Licensing & Regulation (DLLR) (jobs); and the Department of Public Safety and Correctional Services (DPSCS) (inmate restoration work).

Governor O'Malley recognizes that the successful implementation the State's energy policy requires a highly trained and skilled workforce. His vision for workforce creation, and the delivery of job training to the unemployed, low wage workers, untapped populations, veterans, and incumbent workers needing to update their skills for the new jobs in the emerging green economy, are align with the State's energy policy.

The Governor's Workforce Investment Board (GWIB), Maryland's chief policy-making body for workforce development, organized an Energy Initiative Steering Committee (EISC) to analyze workforce demand and supply and to develop strategies and policies that will assist the

Governor, Maryland's workforce system and green economy industries to meet its workforce needs. The EISC is composed of stakeholders from utilities, manufacturing, construction, specialty trade contracting, as well as business services, education, unions, and state and local government. Their recommendations were presented and validated by more than 250 industry leaders and other stakeholders from government, education, and the workforce and economic development communities at an energy summit hosted by Governor O'Malley and GWIB in July 2009. The EISC issued its final report, "Maryland Energy Industry Workforce Report: Preparing Today's Workers for Tomorrow's Opportunities," which defines Maryland's green jobs as "any job directly engaged in the research, development, manufacture, sale, distribution, installation, operation, maintenance, and application of products and services that promote energy efficiency, renewable or clean energy sources."

GWIB recently issued policy guidance for the "Modified State Workforce Development Plan" that provides recommendations to the Maryland DLLR Division of Workforce Development and Adult Learning (DWDAL), Local Workforce Investment Boards (LWIBs), other State agencies, and workforce partners. One recommendation calls for the development of **Green Job-Focused Training Programs**. Local areas are encouraged to develop new and/or enhance existing training programs that will prepare workers for green jobs in energy efficiency and the renewable industries. Private and public partnerships that leverage additional sources of federal and state funding are encouraged as well. A second recommendation is to develop **Sector Strategies and Foster Industry Partnerships**. LWIBs are encouraged to allocate at least 20% of their training funds to locally driven sector-based industry partnerships. GWIB has provided sector strategy training to LWIBs, and provided technical assistance in the formation of regional collaboration of employers, training and education providers, labor organizations, community organizations,

and other key stakeholders around a specific industry to address the workforce needs of employers, and the needs of workers for relevant training to advance into good jobs.



### 3. ABSTRACT

The Governor’s Workforce Investment Board, on behalf of the State of Maryland and Governor Martin O’Malley, submits the “Maryland Energy Sector Partnership (MESP): *Smart, Green and Growing*” proposal for consideration. Led by a business-driven Steering Committee, this project addresses the emerging green economy in Maryland by providing a diverse and flexible array of training options that will grow green job skills and competencies of over 2,000 Marylanders in four strategic industries projecting a need for skilled workers. This project will involve partnerships among businesses, community colleges, labor apprenticeship programs, and the One-Stop Workforce System. MESP will address both new and incumbent worker training to ensure a pipeline of skilled new workers and “up-skilled” incumbent workers. The strategic priorities identified by the MESP include consortia in the following sectors:

**Baltimore Regional Green Tech Workers Program. Funding Level ~ \$1,105,167.** This effort will improve manufacturing sustainability practices, waste stream management and “lean to green” practices in the manufacturing sector. The project will train 705 incumbent and new workers in two training tracks - Green Worker Training Program for new, entry-level manufacturing positions, or, for incumbent workers with intermediate skills, Purdue University’s Green Workforce Training Certificate Program. The program offers three levels of certification provided through the Manufacturing Extension Partnership (MEP) and the M-tech Program at the Univ. of MD, working with the local community colleges. Baltimore City, an area impacted by automotive restructuring, is a significant partner of this regional consortium and will be allocated a portion of funding in the amount of \$276,291.

**Green Training for Energy Efficiency Advancement (Green TEEA). Funding Level ~ \$1,898,313.** This partnership of workforce boards, community colleges, building and trades

organizations and labor unions will train 850 workers to retrofit residential, commercial, and industrial buildings. This project will meet the burgeoning need for skilled green construction and trades workers expected to increase in the Baltimore-Washington corridor, much of it resulting from ARRA retrofit investments, BRAC building, and increased EE initiatives of the major utilities due to Empower Maryland legislation. The project will develop and expand green construction training options, providing training for a wide range of construction-related trades and green building. The project will focus on the urban and suburban areas of the Baltimore-Washington Corridor and will be led by the Montgomery County WIB with the assistance and support of many other regional partners. As a partner in this consortium, Baltimore City, an area impacted by automotive restructuring, will be allocated a portion of funds in the amount of \$210,973.

**Chesapeake Area Consortium for Higher Education (CACHE): Institute for Environmental Careers. Funding Level ~ \$1,193,773.** This partnership of four workforce boards, four community colleges, and private sector and government leaders in the counties surrounding the Chesapeake Bay will train 230 students with community college credit bearing courses leading to certifications in environmental technology. Led by the Anne Arundel WIB and Anne Arundel Community College, this project seeks to increase the capacity of workers to take advantage of the growing environmental technology careers that are projected to grow around the state's natural asset of the Chesapeake Bay.

**Go Solar! Regional Partnership. Funding Level \$1,046,431.** This business-driven consortium will utilize existing RE curriculum, mostly sourced from IEC-Chesapeake's existing courses. IBEW Local 26 and IEC-Chesapeake have been approved by NABCEP to act as entry-level service providers, enabling both organizations to offer courses related to and administer the well-

respected entry-level certificate of knowledge exam. The RE training program will collaborate with regional Goodwill Industries, Job Corps, correctional facilities and existing businesses to train 480 new and incumbent workers.

Priority populations served through this grant include those noted in the solicitation, with emphasis on incumbent and dislocated workers, veterans and reservists, low wage workers, and ex-offenders. Maryland has experienced large dislocations since the recession began and will focus much of our efforts on increasing the skills for these workers to reenter the workforce and participate in the new green economy.

Maryland has a long history of partnering within and across the workforce system, with multiple partners collaborating to solve major labor market challenges. MESP will leverage a number of resources, including the Maryland Business Roundtable (MBRT) for Education's nationally-recognized "Be All I Want to Be" campaign and website, DLLR's Apprenticeship Navigators, and training programs developed by MEA and delivered through CETEC.

The 23-member Steering Committee, co-chaired by business leader and GWIB member, Gino Gemignani, Sr. VP, Whiting-Turner Contracting Company, Inc., and Katherine Magruder, Exec. Dir., Maryland Clean Energy Center (CEC), includes cabinet secretaries for labor, energy, economic development, and housing and community development, as well as leading businesses, labor organizations, and other required organizations. We believe that our strong plan and steering committee leadership will result in the outcomes that the solicitation is seeking. As a result of this grant, we anticipate training 2,265 people in the skills and competencies needed to meet the need in the current and near future green energy economy. As a result of our strategic planning efforts we are projecting that at least 70 percent of those trained will be placed into a related job within the three year grant period.



# The Construction and Energy Technologies Education Consortium of the Maryland Community Colleges

The Construction and Energy Technologies Education Consortium (CETEC) addresses the training and workforce recruitment needs of Maryland businesses through the collaborative efforts of Maryland's Community Colleges. More than 6,300 construction workers mastered new skills through CETEC partner colleges in Fiscal Year 2007 alone, and demand for training continues to expand.

## **The CETEC community colleges offer construction and energy businesses:**

- a single point of contact for programs statewide;
- rapid response to workforce demand;
- training for both new and incumbent workers provided when and where employers need it;
- apprenticeship, continuing education, and degree options in construction management and building trades such as carpentry, electrical, plumbing, HVACR, and CAD;
- training for emerging technologies such as Sensitive Compartmented Information Facility (SCIF) construction and Building Information Modeling (BIM);
- curriculum designed to meet industry-approved skills standards;
- consistent curriculum and program quality across the state;
- instructors who are master craftsmen and industry professionals;

## **The CETEC community colleges serve current and potential employees by:**

- promoting construction and energy technologies careers among youth, college students, career changers, and those recently unemployed;
- offering classroom instruction, hands-on work experience, and apprenticeships;
- providing state-of-the-art education that help workers advance in their careers;
- offering uniform programs and transfer of credits for workers who relocate.

## These are a few of the hundreds of programs and courses available through the Consortium:

### Alternative energy

- Geothermal systems
- Green building techniques
- Photovoltaics
- Solar thermal systems
- Solar panel installation

### Apprenticeship and Craft Training

- Carpenter
- Construction craft laborer
- Drywall installer
- Electrician
- Electro-mechanical technician
- HVAC/R
- Ironworker
- Locksmith
- Machinist
- Operating engineer
- Pipefitter
- Plumber/Steamfitter
- Sheet metal worker
- Sprinkler fitter
- Stationary Engineer/Boiler Operations
- Welder

### Construction Skills

- Technical blueprints and schematics
- Building codes and inspection
- Building remodeling and repair
- Insulation installation
- Math for construction trades
- Spanish for construction trades

### Site Preparation and Management

- Erosion and sediment control
- Site elevations, footers and foundations
- Survey technology

### Construction Management

- Estimating
- Contracts and law
- Cost control
- First-line supervisor
- Methods and materials
- Planning and scheduling
- Procurement and contracting
- Project management
- Specifications
- CAD and AutoCAD
- Building Information Modeling (BIM)

### Building Science and Technology

- Architectural Technology
- Building Trades Technology
- Civil engineering
- Interior space design

### Safety and Health

- Hazardous materials handling
- Hazard recognition and control
- Lead paint certification
- OSHA –10 and OSHA-30
- Safety and health standards

## Maryland's CETEC Community Colleges

- **College of Southern Maryland**
- **Community College of Baltimore County**
- **Frederick Community College**
- **Montgomery College**
- **Prince George's Community College**
- Anne Arundel Community College
- Baltimore City Community College
- Carroll Community College
- Chesapeake College
- Hagerstown Community College
- Harford Community College
- Howard Community College
- Wor-Wic Community College

*For more information about the ways the Construction and Energy Technologies Education Consortium and the Community Colleges can serve Maryland businesses, contact:*

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